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10/708,681	03/18/2004	Jianbo Lu	81095831FGT1913	2680

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/708,681
Filing Date: March 18, 2004
Appellant(s): LU ET AL.

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/6/06 appealing from the Office action mailed 5/15/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2001/0020217	Matsuno	9/6/01

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuno (US2001/0020217A1).

Per claim 1, Matsuno teaches a control system for a vehicle having a brake system including an object detection system generating an object detection signal and an object distance signal (15b, figure 1), and a controller coupled to the object detection system programmed to generate a brake-steer signal proportional to the object distance signal (page 3, [0033]).

Per claim 2, Matsuno teaches a direction change (yaw).

Per claim 3, Matsuno teaches controlling brakes to generate the turning force (page 3, [0049]).

Per claims 4-7, Matsuno teaches a CCD camera (11, figure 1) and that other forms of object detection, such as radar or equivalent, are well known in the art (page 1, [0004]).

Per claim 8, Matsuno teaches a control system for a vehicle having a brake system including an object detection system generating an object detection signal and an object distance signal (15b, figure 1), and a controller coupled to the object detection system programmed to generate a brake signal proportional to the object distance signal (page 3, [0033]) and control the brake system (page 3, [0049]).

Per claim 9, Matsuno teaches a brake control system that applies brake signals as is well known in the art (page 3, [0049]-[0050]).

Per claim 10, Matsuno teaches a direction change (yaw).

Per claim 11, Matsuno teaches controlling brakes to generate the turning force (page 3, [0049]).

Per claims 12-15, Matsuno teaches a CCD camera (11, figure 1) and that other forms of object detection, such as radar or equivalent, are well known in the art (page 1, [0004]).

Per claim 16, Matsuno teaches controlling brakes to generate the turning force (page 3, [0049]).

Per claims 17-18, reducing the turning radius is the result of the action being performed in the Matsuno reference.

Per claim 19, Matsuno teaches decreasing the drive torque of one wheel relative to another by applying the brake. This has the natural consequence of increasing the drive torque of the other wheel relative to the braked wheel.

Per claim 20, Matsuno teaches a method of controlling a vehicle having a brake system including an generating an object detection signal and an object distance signal (15b, figure 1), and generating a brake signal proportional to the object distance signal (page 3, [0033]) and control the brake system to avoid the obstacle (page 4, [0070]).

Per claims 21 and 22, Matsuno teaches a CCD camera (11, figure 1) and that other forms of object detection, such as radar or equivalent, are well known in the art (page 1, [0004]).

Per claim 23, reducing the turning radius is the result of the action being performed in the Matsuno reference.

Per claim 24, Matsuno teaches decreasing the drive torque of one wheel relative to another by applying the brake. This has the natural consequence of increasing the drive torque of the other wheel relative to the braked wheel.

Per claims 25 and 26, Matsuno teaches different situations where the signal is applied to the front or rear wheels (page 4, [0055]-[0058]).

Per claim 27, Matsuno teaches a method of controlling a vehicle having a brake system including an generating an object position signal and an object distance signal (15b, figure 1), and generating a brake signal proportional to the object distance signal (page 3, [0033]) and generating a supplemental brake signal in response to the object position signal (page 4, [0070]).

Per claims 28 and 29, Matsuno teaches a CCD camera (11, figure 1) and that other forms of object detection, such as radar or equivalent, are well known in the art (page 1, [0004]).

Per claim 30, Matsuno teaches that the supplemental signal is generated in response to a yaw rate (page 3, [0033]+).

(10) Response to Argument

Examiner respectfully disagrees with the arguments presented by the Appellants. As discussed in the Final Office Action mailed on 5/15/06 the Examiner finds that the brake-steer signal is substantially proportional to the object distance signal for the purposes of anticipating the claims. The claim does not require an equation or defined relationship between the brake-steer signal and the object distance signal. The claim limitation is fulfilled by being merely "proportional" to the object distance signal. In the

Matsuno reference, the vehicle is automatically braked based on a distance beween the vehicle and the obstacle. (Abstract) Further, Matsuno discusses that the distance and the relative speed are outputted to the deceleration judging section, the deceleration calculating section, the braking distance judging section and the first yaw rate calculating section. (Paragraph 24) This shows that the brake-steer signal is indeed proportional to the object distance signal.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Marie A. Weiskopf

THOMAS BLACK
SUPERVISORY PATENT EXAMINER

Conferees:

Thomas Black

Richard Camby